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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/039,072	03/13/1998	ATSUSHI SASAKI	P/1878-109	9140

7590 11/05/2002

OSTROLENK FABER GERB & SOFFEN  
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NEW YORK, NY 100368403

EXAMINER

GRIER, LAURA A

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 11/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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H-5

**Office Action Summary**

Application No.

09/039,072

Applicant(s)

SASAKI, ATSUSHI

Examiner

Laura A Grier

Art Unit

2644

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

**Attachment(s)**

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1); (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. **Claims 1, 4, 6, and 8** is rejected under 35 U.S.C. 102(e) as being anticipated by Craven et al. U. S. Patent No. 5815580.

Regarding **claim 1**, Craven et al. (herein, Craven) discloses compensating filters. Craven's disclosure comprises a loudspeaker (1), which reads a loudspeaker, microphone, which reads on a microphone, a digital filter (5) receiving a sound signal from a sound source (4) to be received by the loudspeaker, which is indicative of the "processor" and power amplifier (col. 5, 37-67, and col. 6, lines 1-26, 42-67 and col. 7, lines 1-12, abstract and figures 1 and 2).

Regarding **claims 4, 6, and 8**, Craven discloses everything claimed. Craven further discloses an arithmetic logic (col. 7, lines 10-12).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over Craven in view of Yashima et al.

Regarding **claim 2**, Craven discloses everything claimed as applied above (see claim 1). Craven further discloses a memory. However, Craven fails to specifically disclose the claimed limitations. However the examiner maintains that such audio components were well known in the art.

Regarding the audio components, Yashima an acoustic replay device. Yashima disclose a D/A converter (58), an A/D converter (63) that indicative of a second A/D converter, means indicative of a regenerative signal processing, and a successive comparison analysis part (figure 11). However, Yashima fails to specifically disclose a first A/D converter. The examiner maintains that n A/D converter was well known in the art.

Regarding the first A/D converter, It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Craven and Yashima by providing an A/D converter the purpose for converting an analog input signal to a digital signal further processing, wherein such a component and technique is of common practice in the art.

Regarding **claims 5, 7, and 9**, Craven, and Yashima disclose everything claimed. Craven further discloses an arithmetic logic (col. 7, lines 10-12).

Regarding **claim 3**, Craven and Yashima discloses everything claimed as filed above (see claim 2). Yashima further discloses a flat sound frequency characteristic in the listening position (col. 13, lines 51-54).

### **Response to Arguments**

Applicant's arguments filed 8/22/02 have been fully considered but they are not persuasive.

The applicant argues that Craven fails to disclose a real-time comparison of a microphone signal and a sound source. According to the interpretation of the claim language of the invention the Craven reference provides support of the invention for comparing the microphone signal and sound source signal, wherein the filter which is couple with a digital processor that operates based the dependence of input and output signals, thus constitutes comparing an input of the sound source that becomes the output of the loudspeaker, and which the latter becomes input of a microphone which is input back into the filter to provide compensation of acoustic distortions of a loudspeaker environment. Wherein, it is inherent that a comparison of some sort is performed to determine the need to compensate.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A Grier whose telephone number is (703) 306-4819. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks


Washington, D.C. 20231

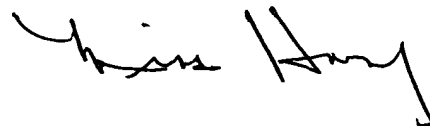
**Or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

LAG   
October 28, 2002



**MINSUN OH HARVEY  
PRIMARY EXAMINER**